chain immunoglobulin polypeptide. Support for a fusion polypeptide comprising a P-selectin glycoprotein ligand-1 polypeptide is found in the specification at page 5, line 7-9. Support for a fusion polypeptide comprising a heavy chain immunoglobulin polypeptide is found in the specification at page 5 lines 37-38. The specification recites "the antigenic fusion protein according to the invention is ... an immunoglobulin or part thereof". It would be well known to one of ordinary skill in the art that the heavy chain is part of an immunoglobulin (See pp 109-111 of Immunology Second Edition, by Janis Kuby, 1994, attached as Exhibit A). Applicant's assert that the phrases "comprising a P-selectin glycoprotein ligand-1 and "heavy chain immunoglobulin polypeptide" meets the written description requirement of § 112, first paragraph and requests that this rejection be withdrawn.

The Examiner rejected Claim 24 for lack of written description for the phrase "an extracellular portion of a P-selectin glycoprotein ligand-1". Applicants disagree. Claim 24 has been canceled, however new independent claim 29, and new dependent claims 30- 32 are directed to a fusion polypeptide comprising an extracellular portion of a P-selectin glycoprotein ligand-1, thus this rejection will be addressed with respect to new claims . The specification as filed provides support for a fusion polypeptide comprising an extracellular portion of a P-selectin glycoprotein ligand-1. Specifically, at page 8, lines 6-10 of the specification, Applicants describe the construction of PSGL1/mIgG_{2b}. "The muscin/immunoglobulin expression plasmid was constructed by fusing the PCR-amplified cDNA of *the extracellular part of PSGL-1* in frame with a BamH1 site, to the Fc part (hinge, CH2 and CH3) of mouse IgG_{2b} carried as an expression casette in CDM7." (Emphasis added). Thus, Applicant's assert that the phrase "extracellular portion of a P-selectin glycoprotein ligand-1" meets the written description requirement of § 112, first paragraph and requests that this rejection as it applies to new claims 29-32 be withdrawn.

The Examiner has rejected claim 25 for lack of written description for the phrase "a region of a heavy chain immunoglobulin polypeptide". Claim 25 has been canceled. Applicants request this rejection be withdrawn.

The Examiner has rejected claim 28 for lack of written description for the phrase "comprises more Galα1,3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1.". Applicants disagree. The specification as filed provides support for a fusion polypeptide comprising more Galα1,3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1.

Specifically, on page 12, lines 23-37, Applicants describe an experiment testing the capacity of Galα1,3Gal substituted PSGL1/mIgG$_{2b}$ compared to non-Galα1,3Gal substituted PSGL1/mIgG$_2$ to remove Galα1,3Gal antibodies from human serum . The results of this experiments (see, FIG. 3) demonstrate that Galα1,3Gal substituted PSGL1/mIgG$_{2b}$ has a higher absorption capacity for Galα1,3Gal antibodies than non-Galα1,3Gal substituted PSGL1/mIgG$_{2b}$. This is evident from the decrease in porcine endothelial cell cytotoxicity following absorption. It would be obvious to one skilled in the art that this higher absorption capacity of Galα1,3Gal substituted PSGL1/mIgG$_{2b}$ for Galα1,3Gal antibodies was a direct result of the of the Galα1,3Gal substituted PSGL1/mIgG$_{2b}$ having more Galα1,3Gal epitopes than the non-Galα1,3Gal substituted PSGL1/mIgG$_{2b}$ (*i.e.,* wild type PSGL1). Thus, Applicant's assert that the phrase "more Galα1,3Gal epitopes than a wild-type P-selectin glycoprotein ligand-1" meets the written description requirement of § 112, first paragraph and requests that this rejection as it applies to claims 28 and new claims 33 and 38 be withdrawn.

§ USC 112, First Paragraph Rejection, Enablement

The Examiner has rejected claims 21- 26, and 28 under 35 USC 112 first paragraph for lack of enablement. The Examiner asserts that the specification does not reasonably provide enablement for a dimerized fusion protein comprising at least a region of a PSGL-1 and at least a region of an immunoglobulin polypeptide because "the specification fails to disclose a definition for 'at least a region.'" (Office action, page 4 line 2). Applicants have amended independent claim 21 (from which 22-26 and 28 depend) to delete the phrase "at least a region". Therefore this rejection is now moot.

CONCLUSION

Applicants believe that the claims, as amended are in condition for allowance. If the Examiner has any questions, the Examiner is invites to contact the undersigned by telephone.

Respectfully submitted,

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Dated: May 20, 2002

Version Marked to Show Changes

Claim 21 was amended as follows:

21. A dimerized fusion polypeptide comprising a first polypeptide operably linked to a second polypeptide, wherein the first polypeptide:

(a) comprises [at least a region of] a P-selectin glycoprotein ligand-1; and

(b) is glycosylated by an α1,3 galactosyltransferase and

the second polypeptide comprises [at least a region of] an immunoglobulin <u>heavy chain</u> polypeptide.